jc690 U.S. PTO
09/459479
12/13/99

FIG. 1

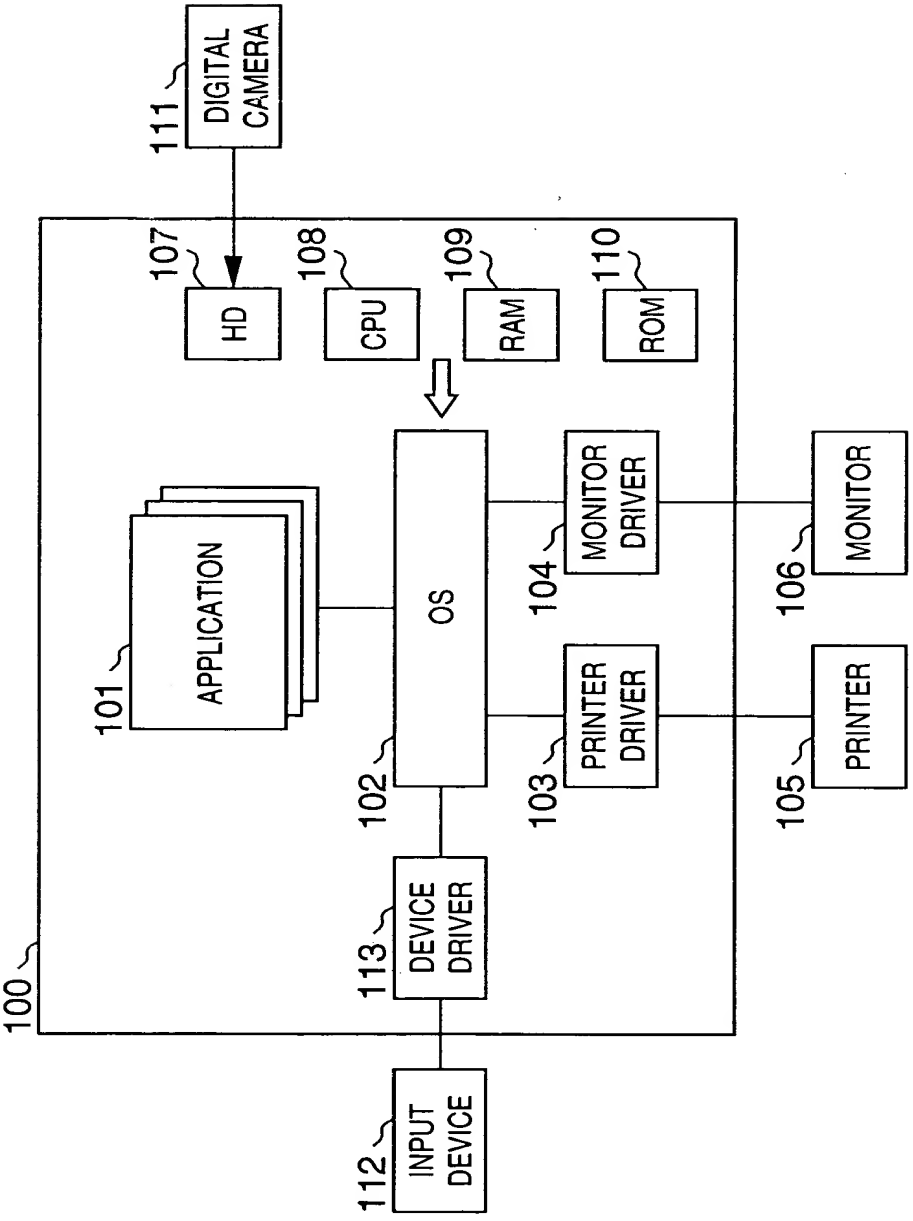


FIG. 2

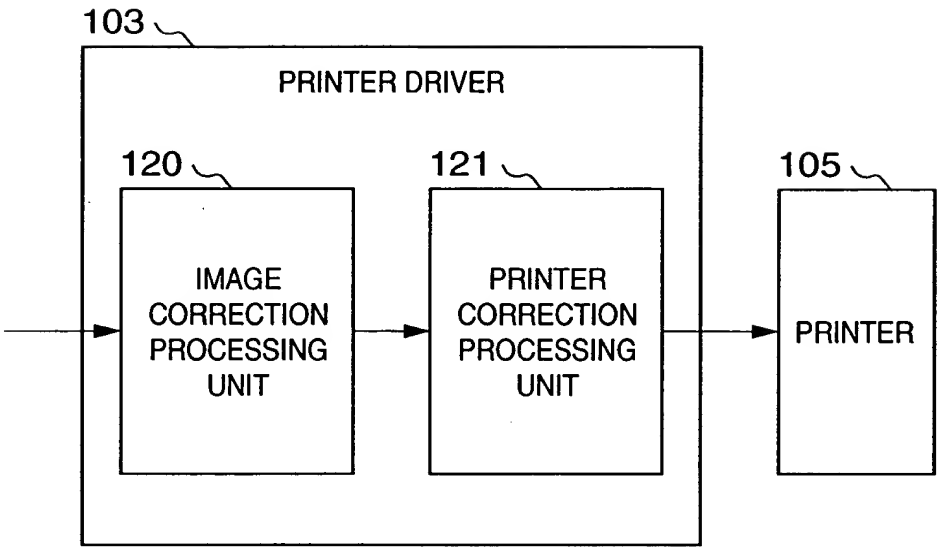

103
PRINTER DRIVER
120
IMAGE CORRECTION PROCESSING UNIT
121
PRINTER CORRECTION PROCESSING UNIT
105
PRINTER

FIG. 3

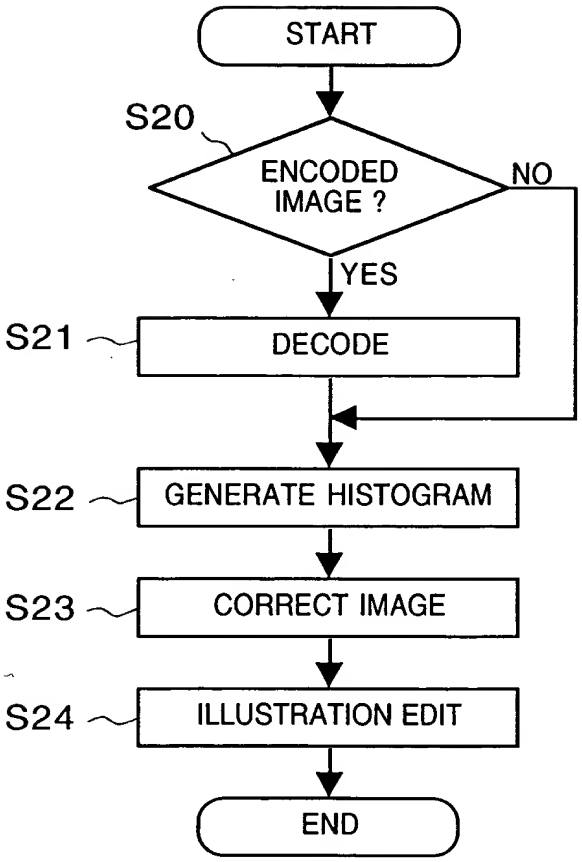

START
S20
ENCODED IMAGE ?
NO
YES
S21
DECODE
S22
GENERATE HISTOGRAM
S23
CORRECT IMAGE
S24
ILLUSTRATION EDIT
END

FIG. 4

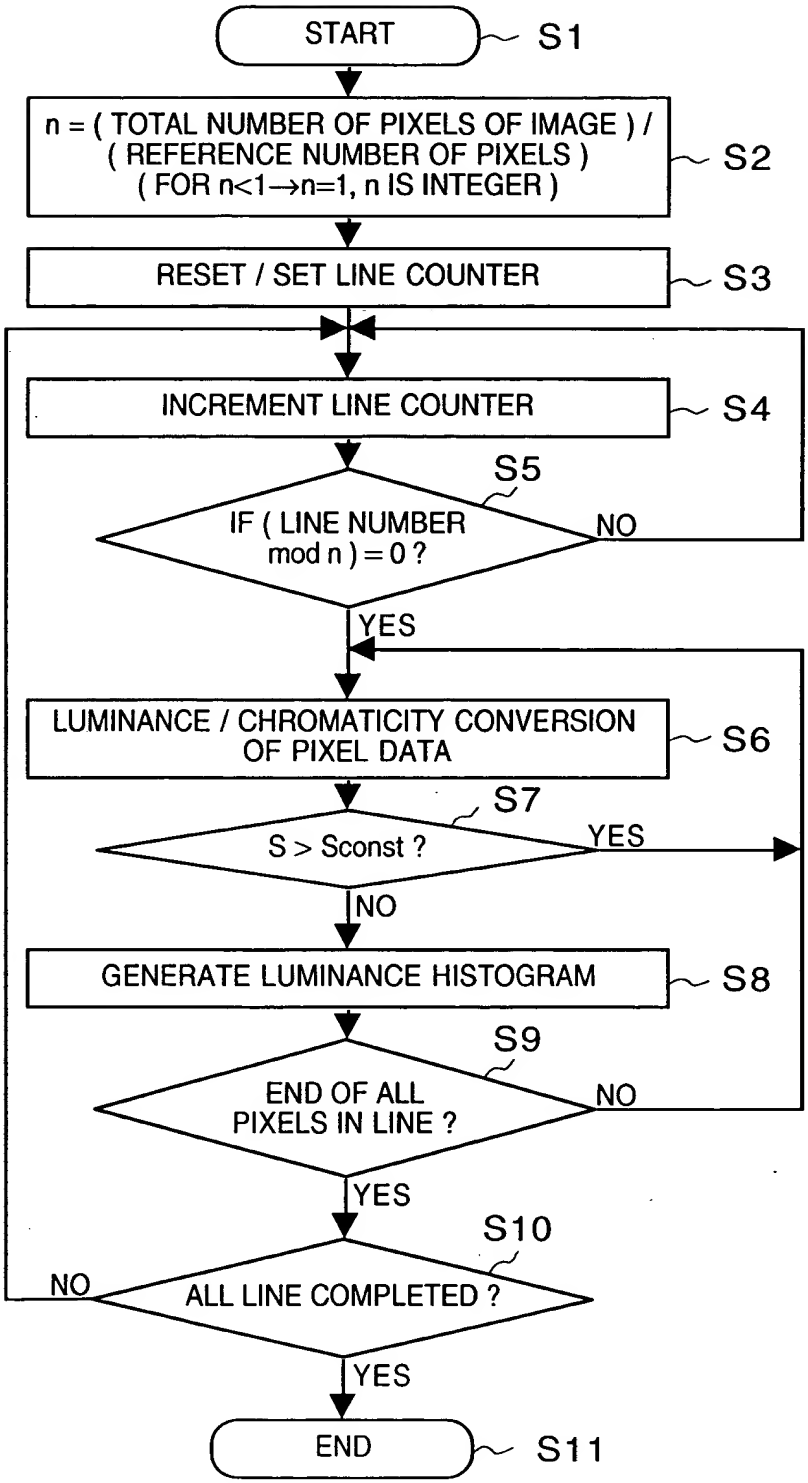
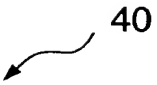

START
S1
n = (TOTAL NUMBER OF PIXELS OF IMAGE) / (REFERENCE NUMBER OF PIXELS) (FOR n<1→n=1, n IS INTEGER)
S2
RESET / SET LINE COUNTER
S3
INCREMENT LINE COUNTER
S4
S5
IF (LINE NUMBER mod n) = 0 ?
NO
YES
LUMINANCE / CHROMATICITY CONVERSION OF PIXEL DATA
S6
S7
S > Sconst ?
YES
NO
GENERATE LUMINANCE HISTOGRAM
S8
S9
END OF ALL PIXELS IN LINE ?
NO
YES
S10
NO
ALL LINE COMPLETED ?
YES
END
S11

FIG. 5



−1	−1	−1	−1	−1
−1	−1	−1	−1	−1
−1	−1	26	−1	−1
−1	−1	−1	−1	−1
−1	−1	−1	−1	−1

FIG. 6A

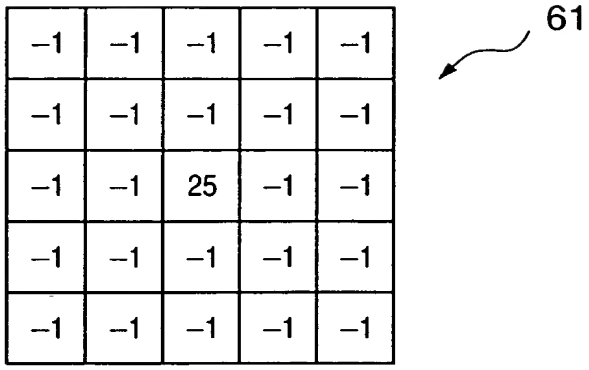


FIG. 6B

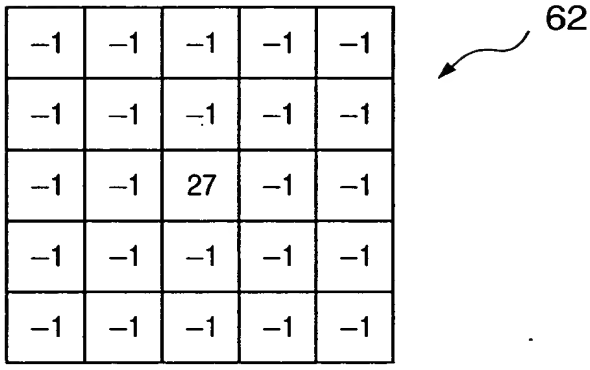


FIG. 6C

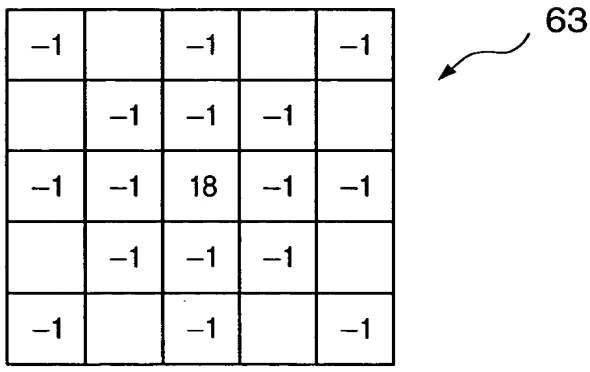


FIG. 7

−1	−1	−1
−1	10	−1
−1	−1	−1

FIG. 8

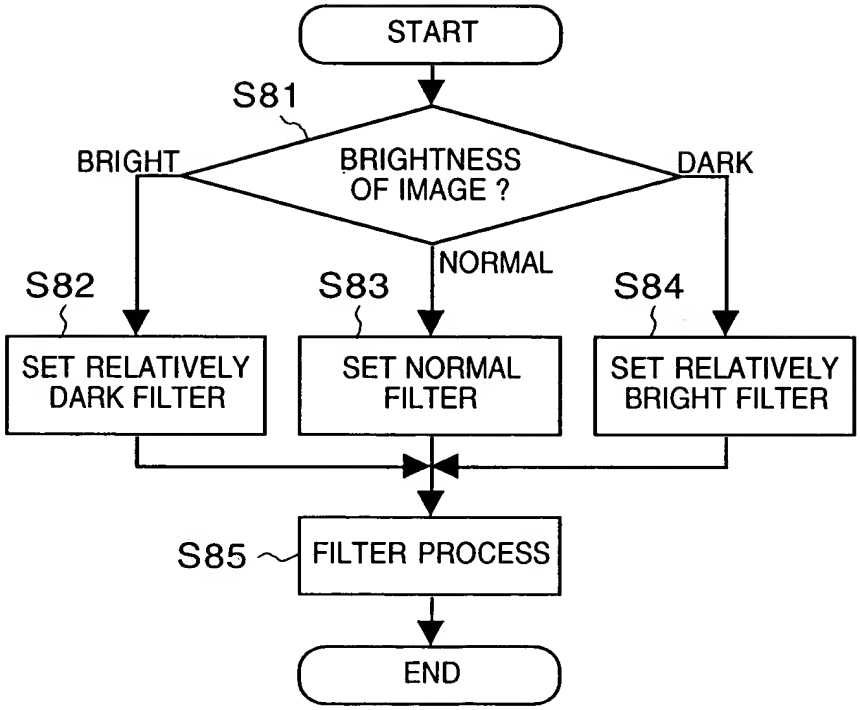

START
S81
BRIGHTNESS OF IMAGE ?
BRIGHT
DARK
NORMAL
S82
S83
S84
SET RELATIVELY DARK FILTER
SET NORMAL FILTER
SET RELATIVELY BRIGHT FILTER
S85
FILTER PROCESS
END

FIG. 9

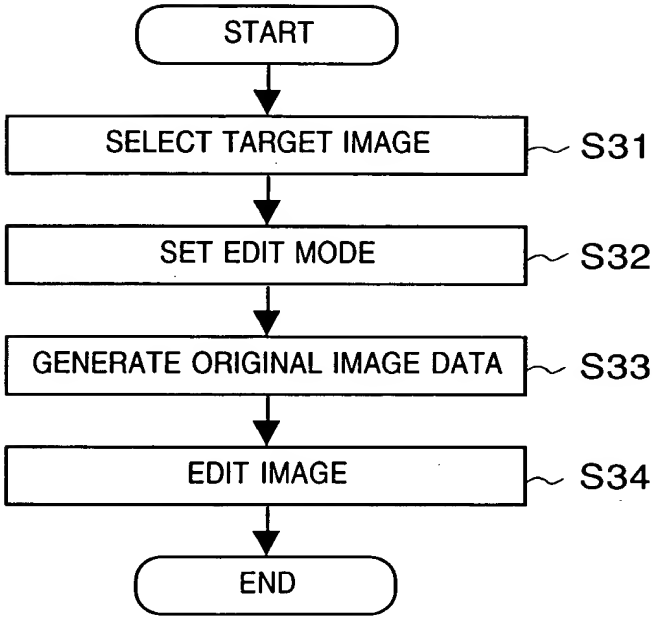

START
SELECT TARGET IMAGE
S31
SET EDIT MODE
S32
GENERATE ORIGINAL IMAGE DATA
S33
EDIT IMAGE
S34
END

FIG. 10

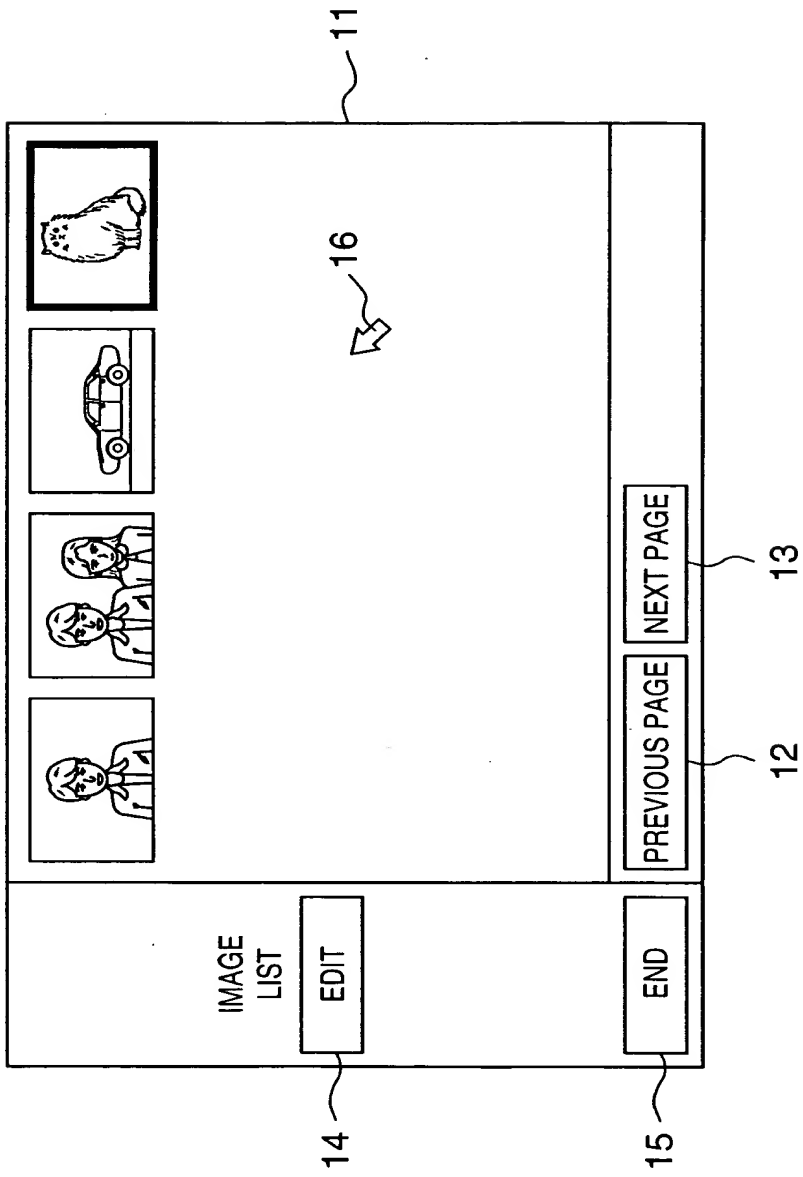


FIG. 11

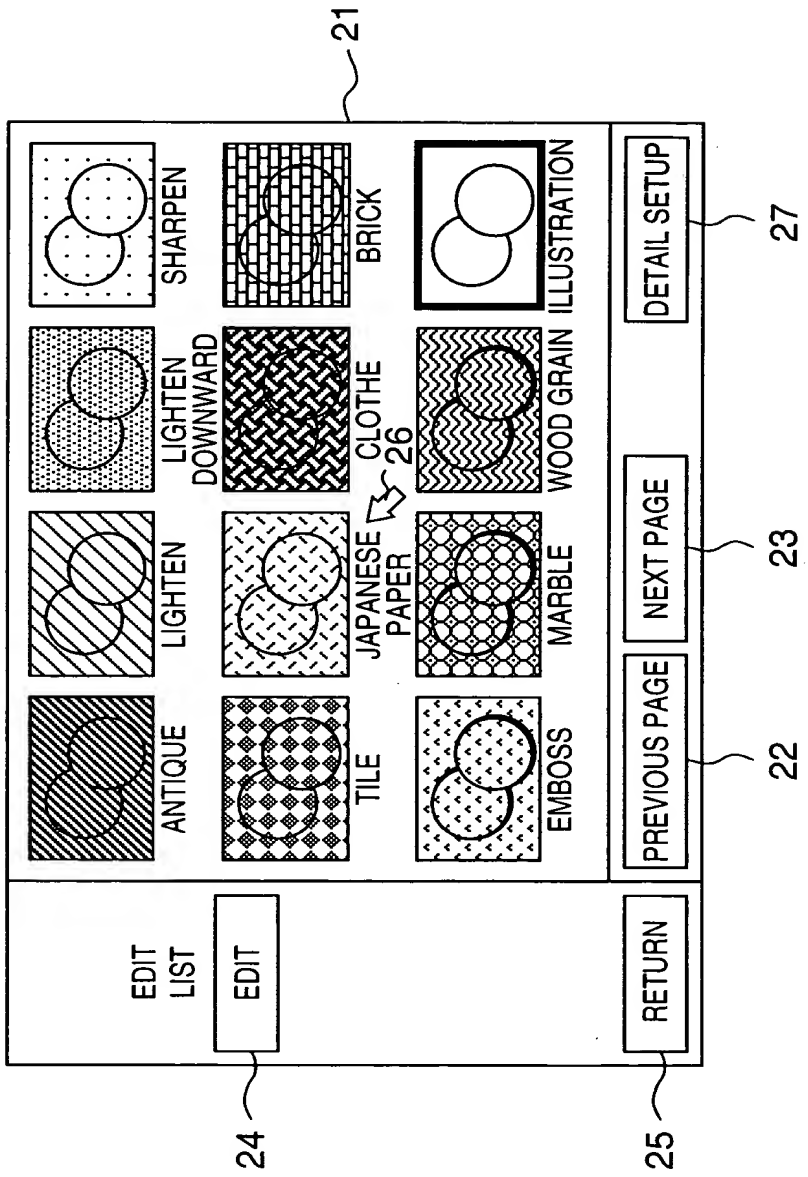

21
ANTIQUE
LIGHTEN
JAPANESE PAPER
LIGHTEN DOWNWARD
CLOTHE
SHARPEN
BRICK
ILLUSTRATION
TILE
EMBOSS
MARBLE
WOOD GRAIN
26
EDIT LIST
EDIT
24
RETURN
25
PREVIOUS PAGE
22
NEXT PAGE
23
DETAIL SETUP
27

FIG. 12

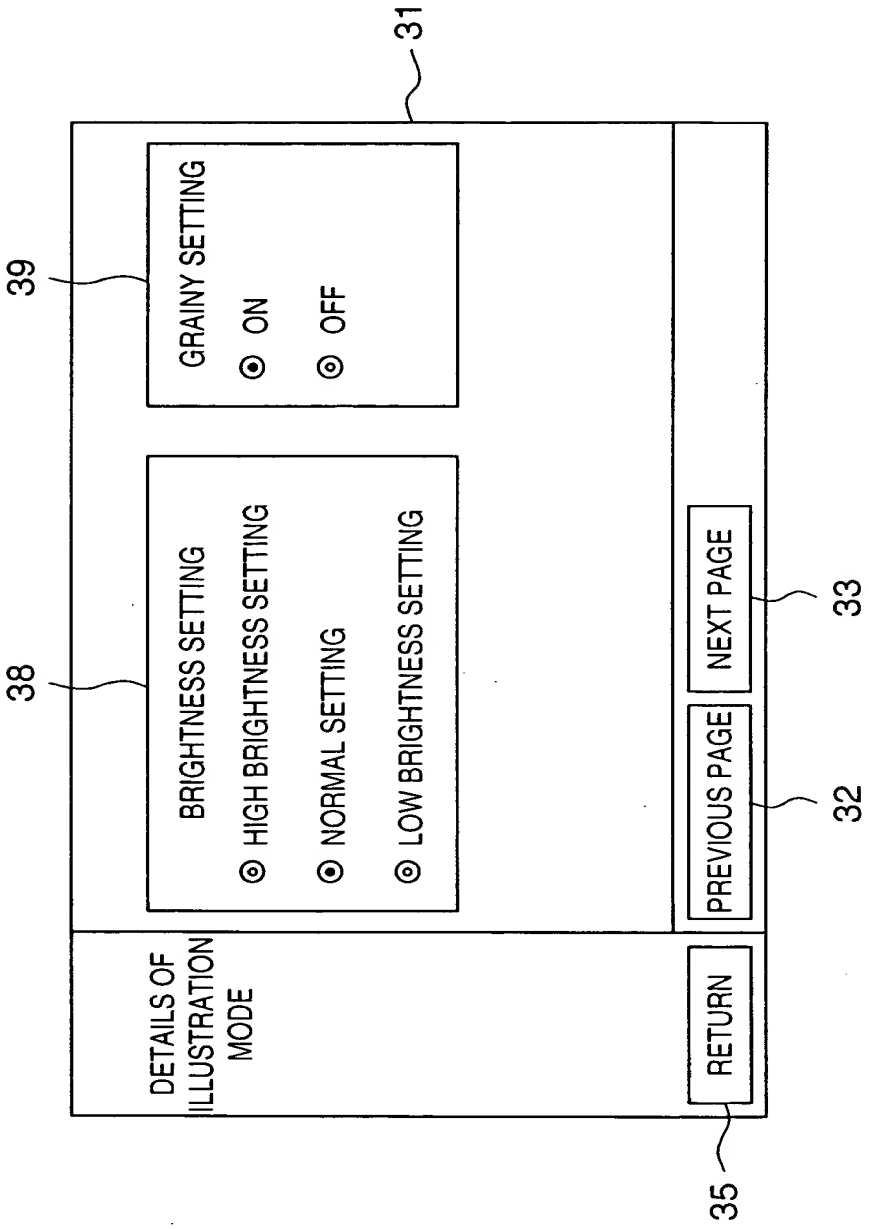

31
39
GRAINY SETTING
ON
OFF
38
BRIGHTNESS SETTING
HIGH BRIGHTNESS SETTING
NORMAL SETTING
LOW BRIGHTNESS SETTING
NEXT PAGE
33
PREVIOUS PAGE
32
DETAILS OF ILLUSTRATION MODE
RETURN
35

FIG. 13

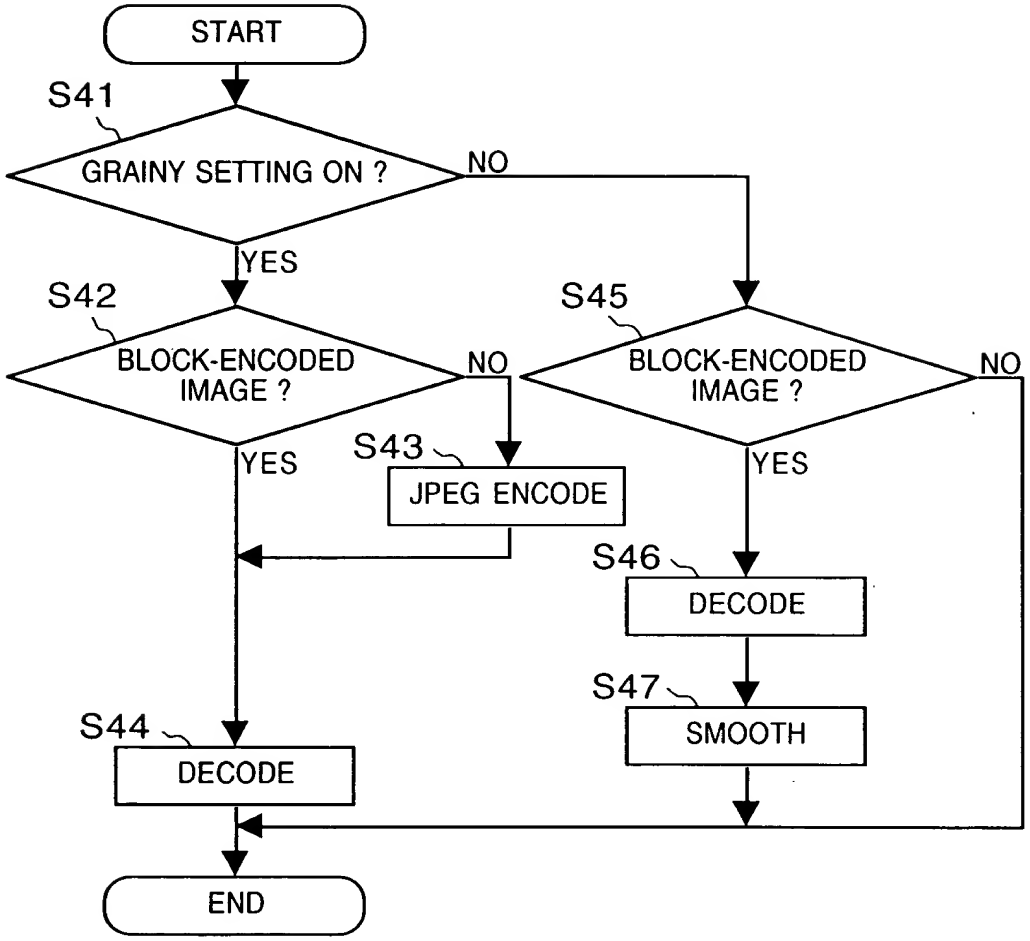

START
S41
GRAINY SETTING ON ?
NO
YES
S42
BLOCK-ENCODED IMAGE ?
NO
YES
S43
JPEG ENCODE
S44
DECODE
S45
BLOCK-ENCODED IMAGE ?
NO
YES
S46
DECODE
S47
SMOOTH
END

FIG. 14

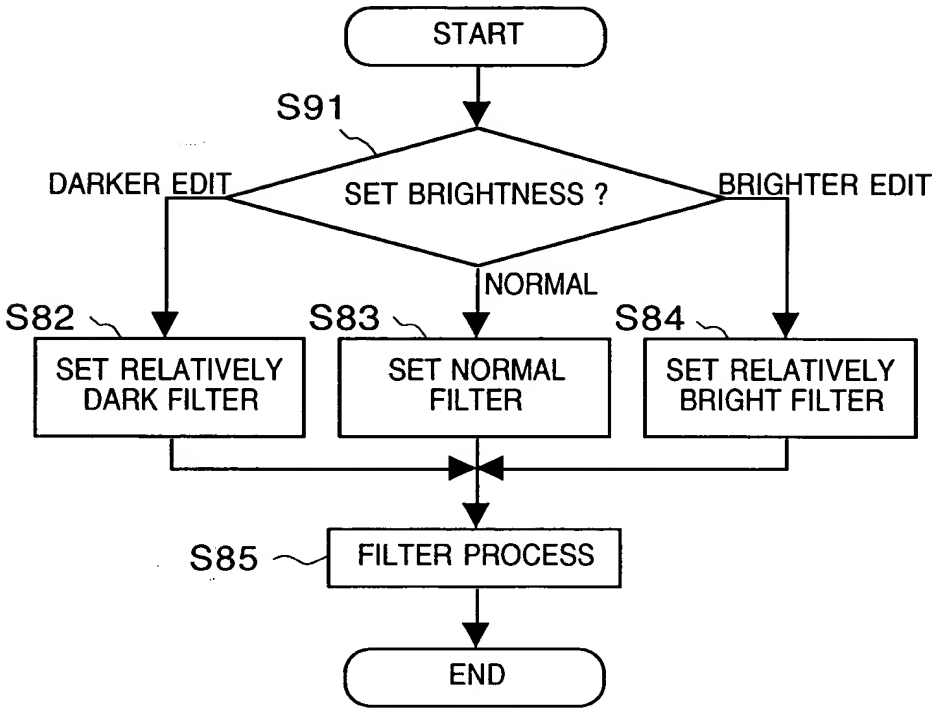

START
S91
SET BRIGHTNESS ?
DARKER EDIT
BRIGHTER EDIT
NORMAL
S82
S83
S84
SET RELATIVELY DARK FILTER
SET NORMAL FILTER
SET RELATIVELY BRIGHT FILTER
S85
FILTER PROCESS
END

FIG. 15

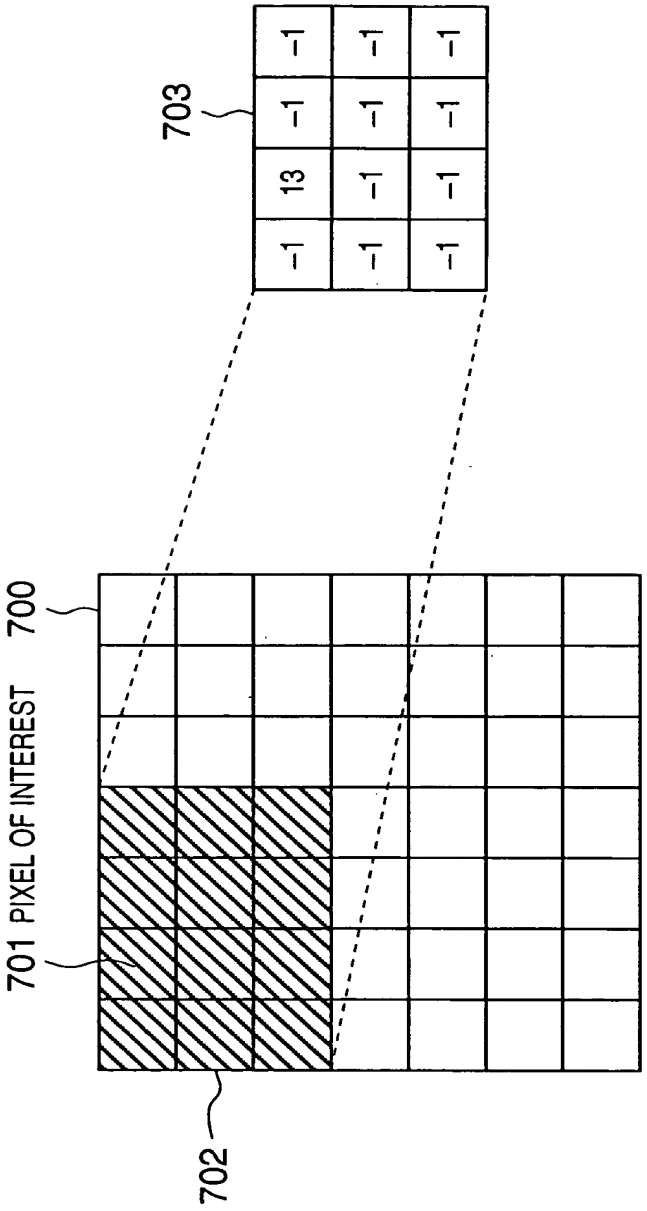


FIG. 16B

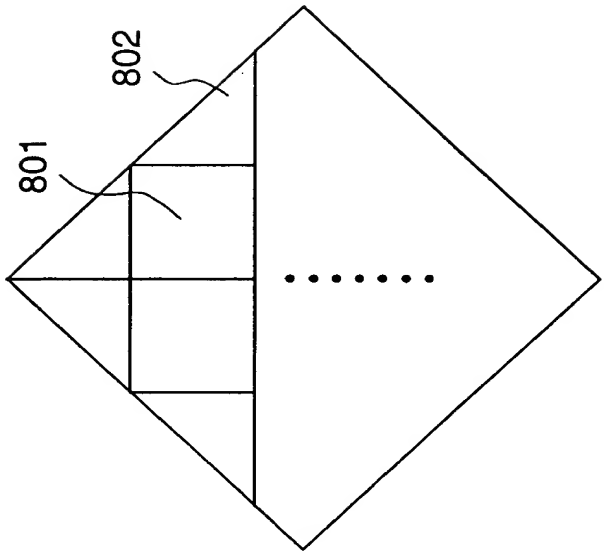


FIG. 16A

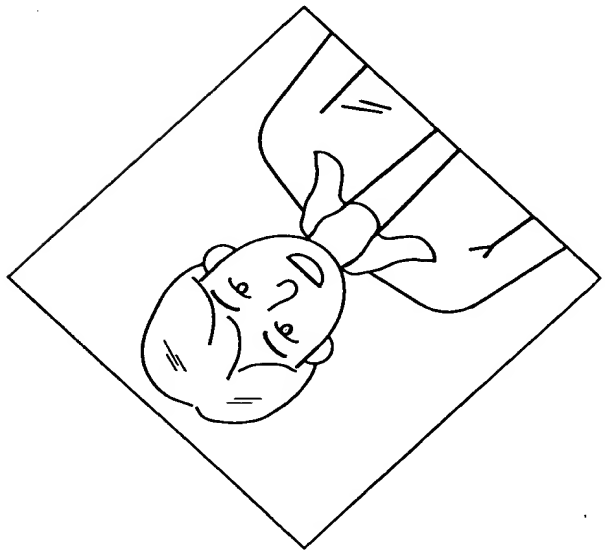


FIG. 17

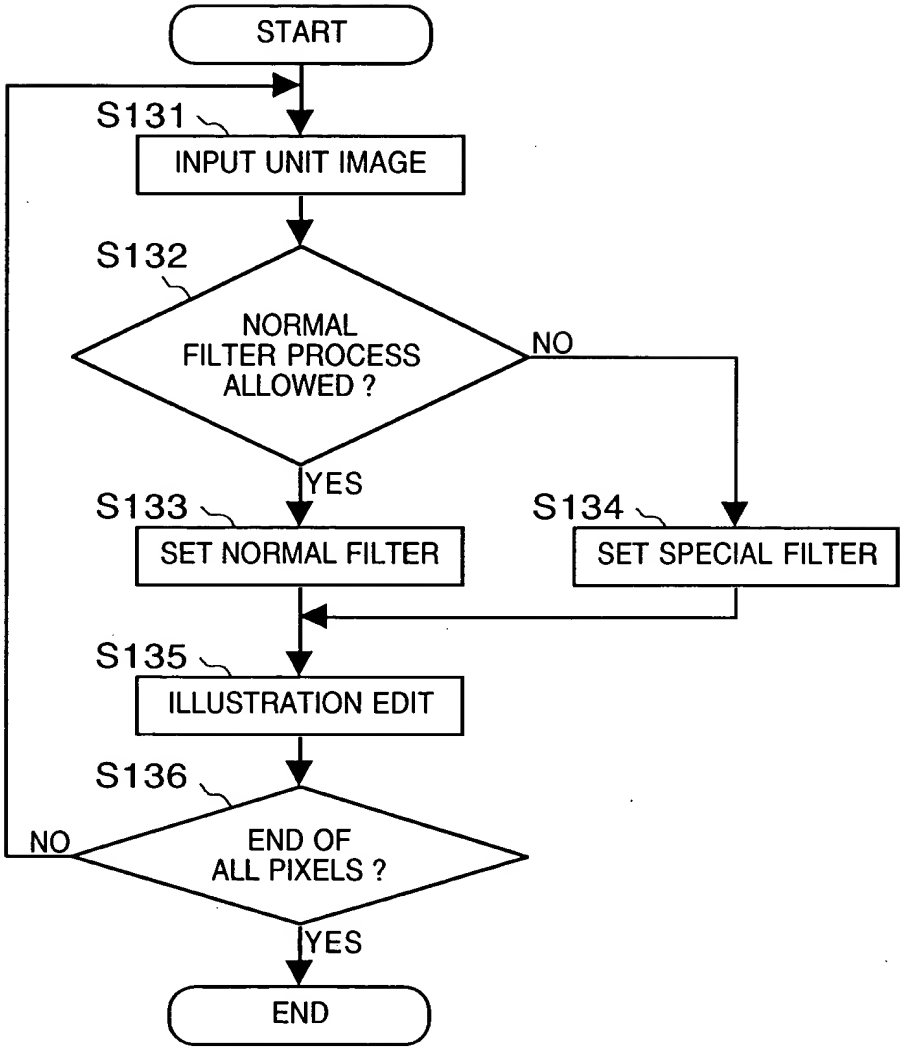

START
S131
INPUT UNIT IMAGE
S132
NORMAL FILTER PROCESS ALLOWED ?
NO
YES
S133
SET NORMAL FILTER
S134
SET SPECIAL FILTER
S135
ILLUSTRATION EDIT
S136
END OF ALL PIXELS ?
NO
YES
END

FIG. 18B

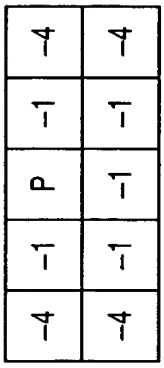


FIG. 18A

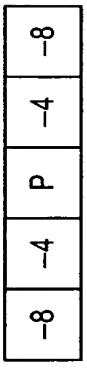


FIG. 19A

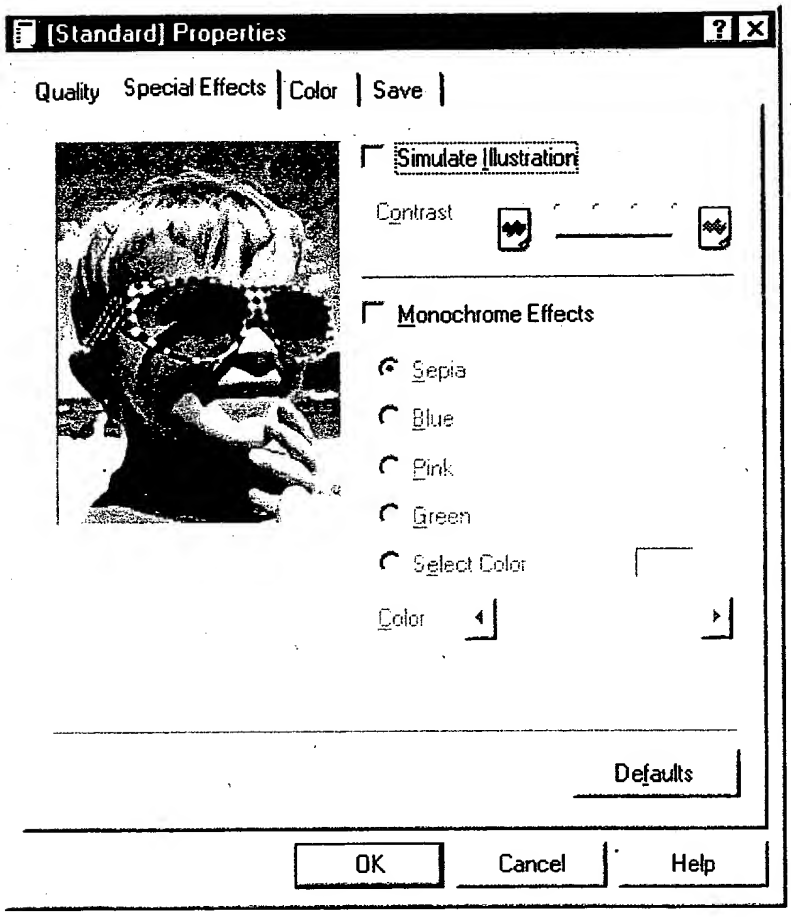

[Standard] Properties
Quality
Special Effects
Color
Save
Simulate Illustration
Contrast
Monochrome Effects
Sepia
Blue
Pink
Green
Select Color
Color
Defaults
OK
Cancel
Help

FIG. 19B

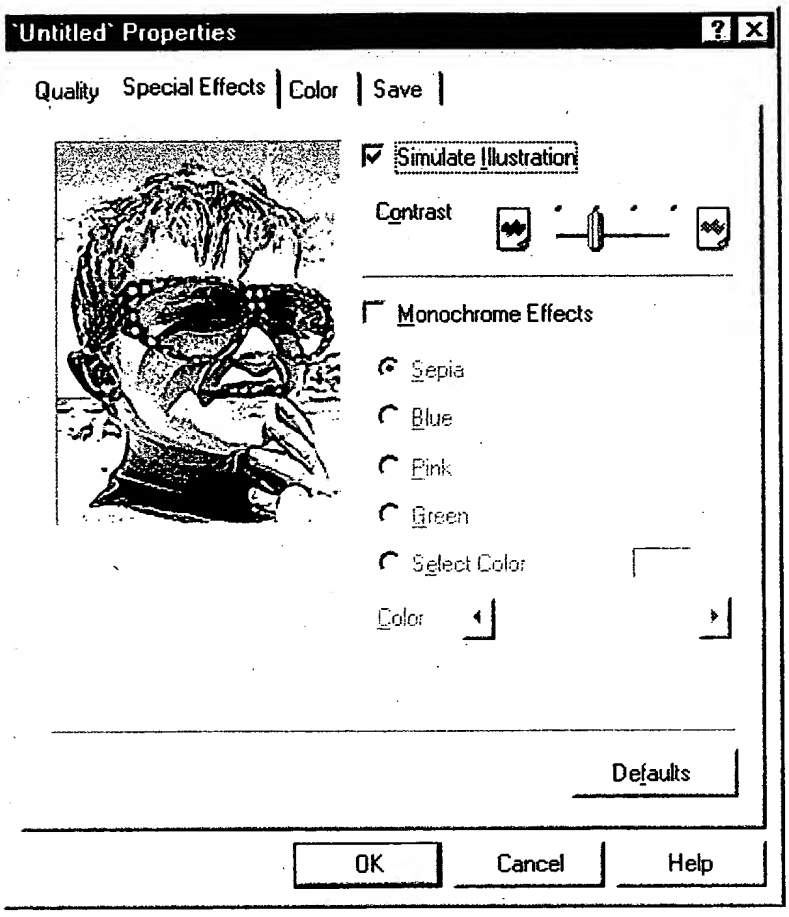

`Untitled` Properties
Quality
Special Effects
Color
Save
Simulate Illustration
Contrast
Monochrome Effects
Sepia
Blue
Pink
Green
Select Color
Color
Defaults
OK
Cancel
Help

FIG. 19C

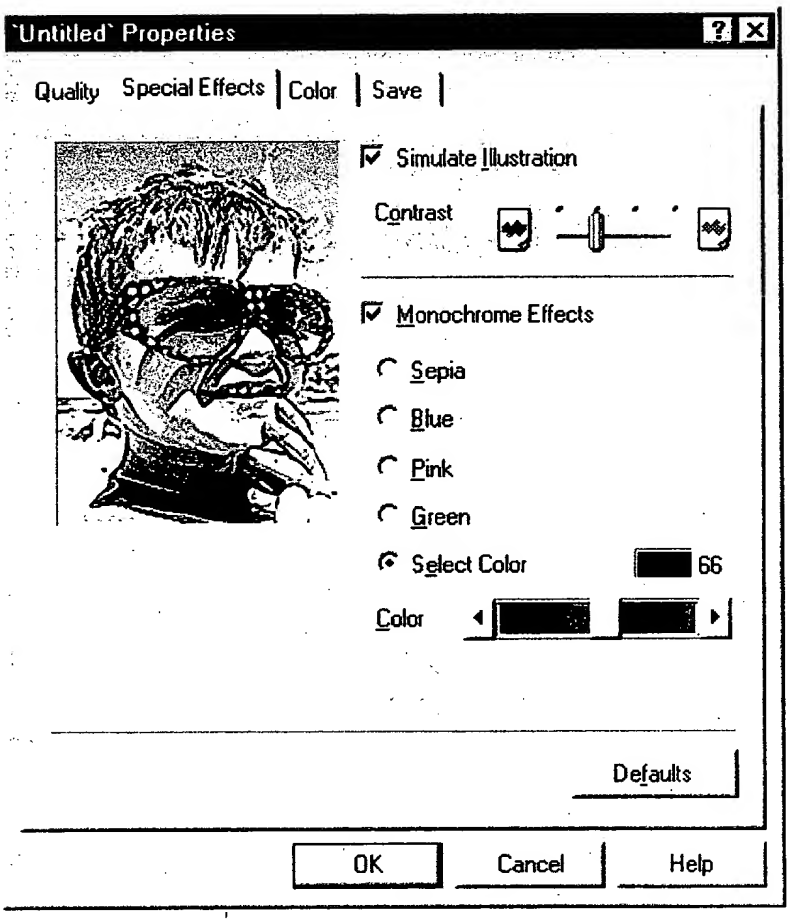

'Untitled' Properties
Quality
Special Effects
Color
Save
Simulate Illustration
Contrast
Monochrome Effects
Sepia
Blue
Pink
Green
Select Color
66
Color
Defaults
OK
Cancel
Help

FIG. 20A

FIG. 20B

FIG. 20C

FIG. 20D

FIG. 21A

FIG. 21B

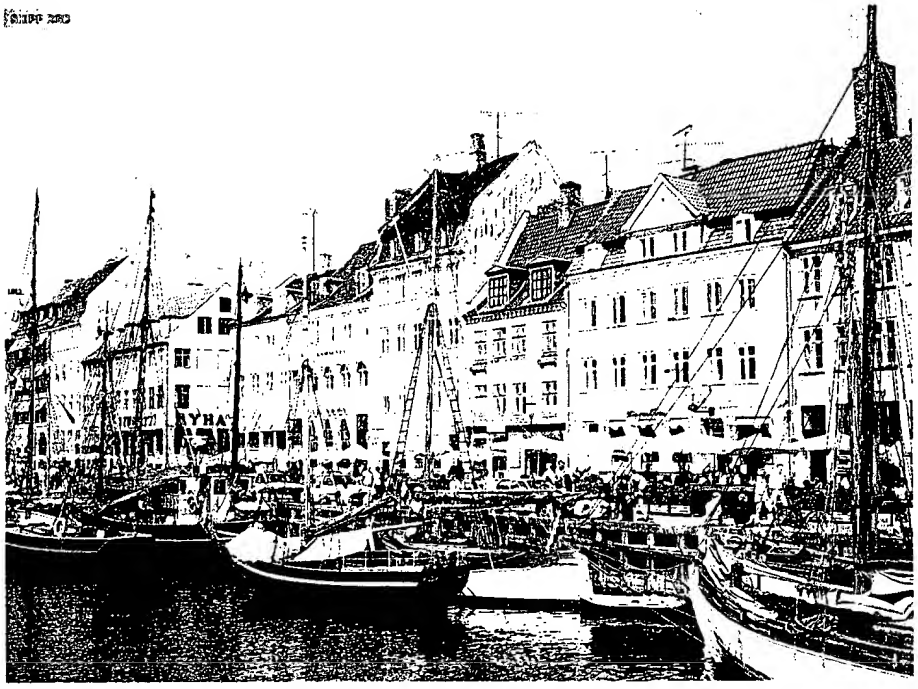
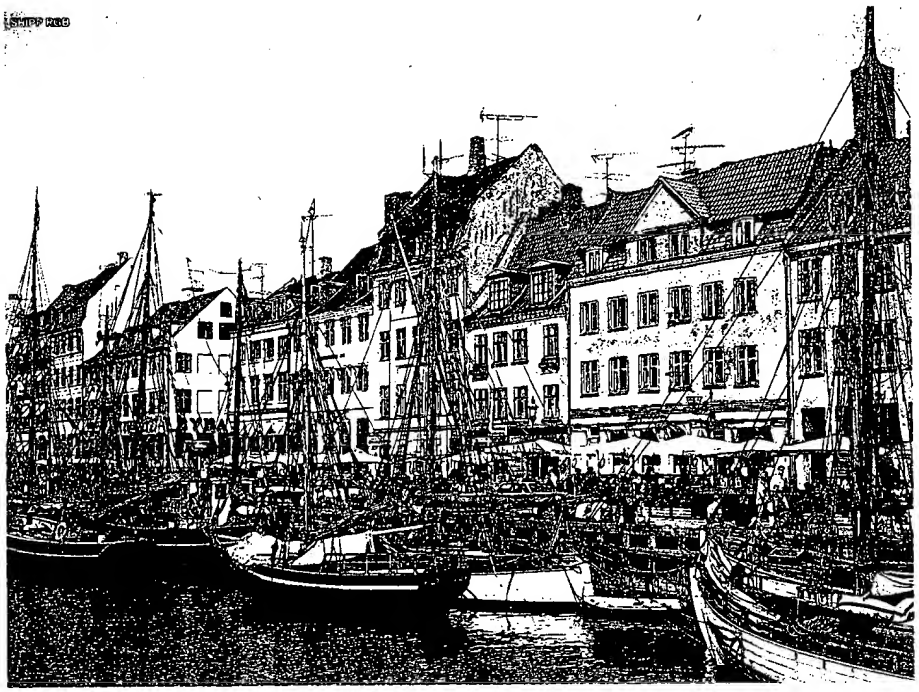



FIG. 21C